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=> d que stat l14
L1             1 SEA FILE=REGISTRY ABB=ON  C31H38F2IN3O3/MF
L7        694719 SEA FILE=HCAPLUS ABB=ON  (?MELANOMA? OR ?CANCER? OR ?CARCIN?
                 OR ?NEOPLASM? OR ?TUMOR? OR ?TUMOUR?)
L8             9 SEA FILE=HCAPLUS ABB=ON  L7 AND ?XENOGENEIC?(L)(L1 OR ?TYROSINA
                 SE?)
L9          2179 SEA FILE=HCAPLUS ABB=ON  L7 AND (L1 OR ?TYROSINASE?)
L10         1007 SEA FILE=HCAPLUS ABB=ON  L9 AND ((?HUMAN? OR ?SYNGENEIC?)(W)(?D
                 IFF?(W)?ANTIGEN?) OR ?HUMAN?)
L11          261 SEA FILE=HCAPLUS ABB=ON  L10 AND (DNA? OR ?TUMOUR?(W)?AGENT?)
L12            6 SEA FILE=HCAPLUS ABB=ON  L11 AND (?CANINE? OR DOG?)
L13           14 SEA FILE=HCAPLUS ABB=ON  L8 OR L12
L14            6 SEA FILE=HCAPLUS ABB=ON  L13 AND (?CANINE? OR DOG?)

=> d ibib abs l14 1-6

L14  ANSWER 1 OF 6  HCAPLUS  COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:         2003:273846  HCAPLUS
DOCUMENT NUMBER:          139:358123
TITLE:                    Long-Term Survival of Dogs with Advanced
                          Malignant Melanoma after DNA
                          Vaccination with Xenogeneic Human
                          Tyrosinase: A Phase I Trial
AUTHOR(S):                Bergman, Philip J.; McKnight, Joanne; Novosad, Andrew;
                          Charney, Sarah; Farrelly, John; Craft, Diane; Wulderk,
                          Michelle; Jeffers, Yusuf; Sadelain, Michel; Hohenhaus,
                          Ann E.; Segal, Neil; Gregor, Polly; Engelhorn, Manuel;
                          Riviere, Isabelle; Houghton, Alan N.; Wolchok, Jedd D.
CORPORATE SOURCE:         Donaldson-Atwood Cancer Clinic and Flaherty
                          Comparative Oncology Laboratory, The E&M Bobst
                          Hospital of the Animal Medical Center, New York, NY,
                          10021, USA
SOURCE:                   Clinical Cancer Research (2003), 9(4), 1284-1290
                          CODEN: CCREF4; ISSN: 1078-0432
PUBLISHER:                American Association for Cancer Research
DOCUMENT TYPE:            Journal
LANGUAGE:                 English
AB   Canine malignant melanoma (CMM) is a spontaneous,
     aggressive, and metastatic neoplasm. Preclin. mouse studies
     have shown that xenogeneic DNA vaccination with genes
     encoding tyrosinase family members can induce antibody and
     cytotoxic T-cell responses, resulting in tumor rejection. These
     studies provided the rationale for a trial of xenogeneic
     DNA vaccination in CMM using the human
     tyrosinase gene. Three cohorts of three dogs each with
     advanced (WHO stage II, III, or IV) CMM received four biweekly i.m.
     injections (dose levels 100, 500, or 1500 μg, resp./vaccination) of
     human tyrosinase plasmid DNA i.m. via the
     Biojector2000 delivery device. Mild local reactions at injection sites
     were the only toxicities observed, with no signs of autoimmunity. One
     dog with stage IV disease had a complete clin. response in
     multiple lung metastases for 329 days. Two dogs with stage IV
     disease had long-term survivals (421 and 588+ days) in the face of
     significant bulky metastatic disease, and two other dogs with
     locally controlled stage II/III disease had long-term survivals (501 and
     496 days) with no evidence of melanoma on necropsy. Four other
     dogs were euthanized because of progression of the primary
     tumor. The Kaplan-Meier median survival time for all nine
     dogs was 389 days. The results of this trial demonstrate that
     xenogeneic DNA vaccination of dogs with
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advanced malignant **melanoma** is a safe and potentially therapeutic modality. On the basis of these results, addnl. evaluation of this novel therapeutic is warranted in locally controlled CMM and advanced **human melanoma.**

REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:794136 HCAPLUS
DOCUMENT NUMBER: 137:309482
TITLE: Compositions for treatment of **melanoma** and method of using same
INVENTOR(S): Houghton, Alan N.; Bergman, Philip J.; Wolchok, Jedd D.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 15 pp., Cont.-in-part of U. S. Ser. No. 627,694.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2002150589	A1	20021017	US 2001-996128		20011127
WO 9825574	A2	19980618	WO 1997-US22669		19971210
WO 9825574	A3	19980903			
W: CA, JP, US					
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE					
US 6328969	B1	20011211	US 1999-308697		19990521
PRIORITY APPLN. INFO.:			US 1996-32535P	P	19961210
			US 1997-36419P	P	19970217
			WO 1997-US22669	W	19971210
			US 1999-308697	A2	19990521
			US 2000-180651P	P	20000126
			US 2000-627694	A2	20000728

AB **Melanoma** can be treated in a mammalian subject by administering to the subject an immunol.-effective amount of a xenogeneic **melanoma** -associated differentiation antigen. For example, genetic immunization with a plasmid containing a sequence encoding **human** gp75 has been shown to be effective in treatment of **dogs** with **melanoma.**

L14 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:747832 HCAPLUS
DOCUMENT NUMBER: 135:313607
TITLE: Fusogenic protein genes regulated by tissue-specific excision and their use in **cancer** therapy
INVENTOR(S): Vile, Richard G.; Harrington, Kevin; Murphy, Stephen; Bateman, Andrew
PATENT ASSIGNEE(S): Mayo Foundation for Medical Education and Research, USA
SOURCE: PCT Int. Appl., 84 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 2001074861	A2	20011011	WO 2001-US10250	20010330
WO 2001074861	A3	20020314		
WO 2001074861	C2	20021227		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 2002150556	A1	20021017	US 2001-822634	20010330

PRIORITY APPLN. INFO.: US 2000-193977P P 20000331

AB A method of ensuring **tumor** specific expression of a cytotoxic gene is described. Th preferred gene encodes a viral fusogenic peptide that stimulates syncytium formation. The gene is under control of a **tumor**-specific promoter and is flanked by a pair of sites recognized by a site-specific recombinase. The recombinase gene is under control of a promoter that functions in normal tissue, but not in the **tumor** cell. In normal tissues, the fusogenic protein gene is excised by site-specific recombination and lost. In **tumor** cells, the gene is not lost by excision and is expressed. After cell fusion and syncytium formation, the **tumor** cells die.

L14 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:101291 HCAPLUS
DOCUMENT NUMBER: 134:161880
TITLE: cDNAs encoding the Flt-3 receptor ligand and there use as adjuvants in vector vaccines
INVENTOR(S): Hermanson, Gary George
PATENT ASSIGNEE(S): Vical Inc., USA
SOURCE: PCT Int. Appl., 148 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001009303	A2	20010208	WO 2000-US20679	20000731
WO 2001009303	A3	20010816		

W: CA, JP, US

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

PRIORITY APPLN. INFO.: US 1999-146170P P 19990730

AB A method of increasing the strength of the immune response of vector vaccines using an expression vector for the Flt3 ligand is described. The vaccines are made of independent non-integrating expression vectors: one encodes the antigen or a cytokine and the other encodes the Flt3 ligand. The present invention also provides a method broadly directed to improving immune response of a vertebrate in need of immunotherapy by administering in vivo, into a tissue of a vertebrate, a Flt-3 ligand-encoding polynucleotide and one or more antigen- or cytokine-encoding polynucleotides. The polynucleotides are incorporated into the cells of the vertebrate in vivo, and a prophylactically or therapeutically effective amount of a Flt-3 ligand and one or more antigens is produced in vivo.

L14 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:351545 HCAPLUS
DOCUMENT NUMBER: 133:16301
TITLE: Immunotherapy with 5T4 antigen
INVENTOR(S): Carroll, Miles William; Myers, Kevin Alan
PATENT ASSIGNEE(S): Oxford Biomedica (UK) Limited, UK
SOURCE: PCT Int. Appl., 79 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000029428	A2	20000525	WO 1999-GB3859	19991118
WO 2000029428	A3	20001109		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1036091	A1	20000920	EP 1999-972219	19991118
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
GB 2347932	A1	20000920	GB 2000-14986	19991118
GB 2347932	B2	20030507		
EP 1152060	A1	20011107	EP 2001-201447	19991118
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
EP 1160323	A1	20011205	EP 2001-201448	19991118
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
GB 2370571	A1	20020703	GB 2001-27669	19991118
GB 2370571	B2	20030507		
GB 2370572	A1	20020703	GB 2001-27673	19991118
GB 2370572	B2	20030507		
GB 2370573	A1	20020703	GB 2001-27675	19991118
GB 2371803	A1	20020807	GB 2002-12763	19991118
JP 2002530060	T2	20020917	JP 2000-582415	19991118
GB 2378704	A1	20030219	GB 2002-24538	19991118
GB 2378704	B2	20030507		
AU 766954	B2	20031030	AU 2000-13949	19991118
WO 2001036486	A2	20010525	WO 2000-GB4317	20001113
WO 2001036486	A3	20020510		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1242456	A2	20020925	EP 2000-974682	20001113

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

JP 2003515323	T2	20030507	JP 2001-538975	20001113
US 2004131591	A1	20040708	US 2002-334235	20021230
PRIORITY APPLN. INFO.:			GB 1998-25303	A 19981118
			GB 1999-1739	A 19990127
			GB 1999-17995	A 19990730
			GB 1997-11579	A 19970604
			GB 1997-13150	A 19970620
			GB 1997-14230	A 19970704
			EP 1999-972219	A3 19991118
			GB 2000-14986	A3 19991118
			GB 2001-27669	A 19991118
			WO 1999-GB3859	W 19991118
			GB 2000-3527	A 20000215
			GB 2000-5071	A 20000302
			US 2000-445375	A2 20000321
			WO 2000-GB4317	W 20001113
			US 2002-60585	A2 20020129

AB The authors disclose the use of recombinant poxvirus vectors in vaccinating against 5T4-expressing **tumors.** In addition, the authors disclose the sequence characterization of 5T4 antigen from **dog.** In one example, mice vaccinated with **human** 5T4 antigen, using a vaccinia virus vector, exhibited protection against challenge with the syngeneic colon **tumor** cell line CT26 expressing **human** 5T4.

L14 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:	1999:819393 HCAPLUS
DOCUMENT NUMBER:	132:45805
TITLE:	Monitoring gene expression or protein levels in evaluating an organism's response to drugs of abuse
INVENTOR(S):	Miles, Michael F.; Lai, Chao-qiang; Lockhart, David J.
PATENT ASSIGNEE(S):	Regents of the University of California, USA
SOURCE:	PCT Int. Appl., 98 pp. CODEN: PIXXD2
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	1
PATENT INFORMATION:	

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9967267	A1	19991229	WO 1999-US13839	19990622

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 9946963	A1	20000110	AU 1999-46963	19990622
PRIORITY APPLN. INFO.:			US 1998-90268P	P 19980622
			US 1999-337022	A 19990621
			WO 1999-US13839	W 19990622

AB This invention pertains to the identification of genes whose expression levels are altered by chronic exposure of a cell, tissue, or organism to one or more drugs of abuse (e.g. alc., stimulants, opiates, etc.). In one

embodiment, this invention provides a method of monitoring the response of a cell to a drug of abuse. The method involves contacting the cell with the drug of abuse; providing a biol. sample comprising the cell; and detecting, in the sample, the expression of one or more genes or ESTs identified herein, where a difference between the expression of one or more of said genes of ESTs in said sample and one or more of said genes or ESTs in a biol. sample not contacted with said drug of abuse indicates a response of the cell to the drug of abuse. Genes and ESTs whose expression was altered by contact of a cell with EtOH were identified by exposing **human** neuroblastoma cell line SH-SY5Y-AH1861. Four genes showed a dose-dependent response to EtOH and are therefore believed to represent important targets of EtOH: dopamine β hydroxylase, sodium-dependent norepinephrine transporter, delta-like protein, and monocyte chemoattractant peptide 1. Similar studies were conducted by exposing mice to cocaine. Altered gene expression in the hippocampus, ventral tegmental area, prefrontal cortex, and nucleus accumbens were observed

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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=> d que stat l16
L1             1 SEA FILE=REGISTRY ABB=ON  C31H38F2IN3O3/MF
L7        694719 SEA FILE=HCAPLUS ABB=ON  (?MELANOMA? OR ?CANCER? OR ?CARCIN?
                 OR ?NEOPLASM? OR ?TUMOR? OR ?TUMOUR?)
L8             9 SEA FILE=HCAPLUS ABB=ON  L7 AND ?XENOGENEIC?(L)(L1 OR ?TYROSINA
                 SE?)
L9          2179 SEA FILE=HCAPLUS ABB=ON  L7 AND (L1 OR ?TYROSINASE?)
L10         1007 SEA FILE=HCAPLUS ABB=ON  L9 AND ((?HUMAN? OR ?SYNGENEIC?)(W)(?D
                 IFF?(W)?ANTIGEN?) OR ?HUMAN?)
L11          261 SEA FILE=HCAPLUS ABB=ON  L10 AND (DNA? OR ?TUMOUR?(W)?AGENT?)
L12            6 SEA FILE=HCAPLUS ABB=ON  L11 AND (?CANINE? OR DOG?)
L13           14 SEA FILE=HCAPLUS ABB=ON  L8 OR L12
L14            6 SEA FILE=HCAPLUS ABB=ON  L13 AND (?CANINE? OR DOG?)
L15            9 SEA L14
L16            6 DUP REMOV L15 (3 DUPLICATES REMOVED)

=> d ibib abs l16 1-6

L16  ANSWER 1 OF 6  WPIDS  COPYRIGHT 2004 THE THOMSON CORP on STN
ACCESSION NUMBER:     2003-354564 [33]   WPIDS
DOC. NO. CPI:         C2003-093465
TITLE:                New compositions comprising immunostimulatory substances
                      packaged into virus-like particles, useful as a vaccine
                      for enhancing an immune response in animals, e.g. for
                      treating or preventing allergies, tumors or
                      viral infections.
DERWENT CLASS:        B04 D16
INVENTOR(S):          BACHMANN, M; CIELENS, I; LIPOWSKY, G; MAURER, P;
                      MEIJERINK, E; PUMPENS, P; RENHOFA, R; SCHWARZ, K; STORNI,
                      T; TISSOT, A; BACHMANN, M F
PATENT ASSIGNEE(S):   (CIEL-I) CIELENS I; (CYTO-N) CYTOS BIOTECHNOLOGY AG;
                      (LIPO-I) LIPOWSKY G; (MAUR-I) MAURER P; (MEIJ-I)
                      MEIJERINK E; (PUMP-I) PUMPENS P; (RENH-I) RENHOFA R;
                      (SCHW-I) SCHWARZ K; (TISS-I) TISSOT A
COUNTRY COUNT:        102
PATENT INFORMATION:

     PATENT NO        KIND DATE     WEEK      LA   PG
     ---------------------------------------------
     WO 2003024481    A2 20030327 (200333)* EN  322
        RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR IE IT KE LS LU
            MC MW MZ NL OA PT SD SE SK SL SZ TR TZ UG ZM ZW
         W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
            DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
            KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT
            RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA
            ZM ZW
     US 2003099668    A1 20030529 (200337)
     AU 2002339224    A1 20030401 (200452)
     EP 1450856       A2 20040901 (200457)  EN
         R: AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LT LU LV MC
            MK NL PT RO SE SI SK TR

APPLICATION DETAILS:

     PATENT NO      KIND                  APPLICATION          DATE
     ------------------------------------------------------------
     WO 2003024481  A2                    WO 2002-IB4132       20020916
     US 2003099668  A1 Provisional        US 2001-318994P      20010914
                       Provisional        US 2002-374145P      20020422
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		US 2002-244065	20020916
AU 2002339224	A1	AU 2002-339224	20020916
EP 1450856	A2	EP 2002-777600	20020916
		WO 2002-IB4132	20020916

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2002339224	A1 Based on	WO 2003024481
EP 1450856	A2 Based on	WO 2003024481

PRIORITY APPLN. INFO: US 2002-374145P 20020422; US 2001-318994P 20010914; US 2002-244065 20020916

AN 2003-354564 [33] WPIDS

AB WO2003024481 A UPAB: 20030526

NOVELTY - A composition for enhancing immune response in animal comprising a virus-like particle, and an immunostimulatory substance, is new. The immunostimulatory substance is bound to the virus-particle particle.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

(1) enhancing an immune response in an animal by introducing into the animal the new composition;

(2) producing the composition for enhancing an immune response in an animal;

(3) vaccines comprising the new composition together with a pharmaceutical diluent, carrier or excipient; and

(4) immunizing or treating an animal by:

(a) administering the vaccine to the animal;

(b) priming a T cell response in the animal by administering the vaccine; or

(c) boosting a T cell response in the animal by administering the vaccine.

ACTIVITY - Immunostimulant; Cytostatic; Antiallergic; Virucide; Antibacterial.

Mice were subcutaneously primed with 100 micro g p33-VLP alone, mixed with 20 nmol CpG-oligonucleotide (p33-VLP+CpG), or p33-VLP packaged with CpG-oligonucleotide after dialysis of free CpG-oligonucleotide (p33-VLP/CpG). Untreated naive mice served as negative control. Twenty days later, mice were challenged with lymphocytic choriomeningitis virus (LCMV) (200 plaque forming units (pfu)), intravenously). Results showed that LCMV titer (log10) was lowest for p33-VLP/CpG.

MECHANISM OF ACTION - Vaccine.

USE - The composition is useful as a vaccine for enhancing an immune response in an animal, particularly a mammal or **human.** Specifically, the composition is useful for enhancing a B cell response, a T cell response (particularly a Th or Th1 cell response), or a cytotoxic T-lymphocyte (CTL) response. (All claimed.) The composition or vaccine is also useful for immunizing or treating an animal (claimed), e.g. **humans**, sheep, horses, cattle, pigs, **dogs**, cats, rats, birds, reptiles or fish. The composition is particularly useful as prophylactic or therapeutic vaccines against allergies, **tumors** (e.g. breast **cancers**, neuroblastoma, or leukemia), viral diseases (e.g. influenza, hepatitis, measles or chicken pox), or bacterial infections (e.g. tuberculosis, pneumonia or syphilis).

Dwg.0/55

L16 ANSWER 2 OF 6 MEDLINE on STN DUPLICATE 1

ACCESSION NUMBER: 2003174788 MEDLINE

DOCUMENT NUMBER: PubMed ID: 12684396

TITLE: Long-term survival of **dogs** with advanced malignant **melanoma** after **DNA** vaccination with **xenogeneic human tyrosinase**: a phase I trial.

AUTHOR: Bergman Philip J; McKnight Joanne; Novosad Andrew; Charney Sarah; Farrelly John; Craft Diane; Wulderk Michelle; Jeffers Yusuf; Sadelain Michel; Hohenhaus Ann E; Segal Neil; Gregor Polly; Engelhorn Manuel; Riviere Isabelle; Houghton Alan N; Wolchok Jedd D

CORPORATE SOURCE: Donaldson-Atwood Cancer Clinic and Flaherty Comparative Oncology Laboratory, The E&M Bobst Hospital of the Animal Medical Center, New York, New York 10021, USA.. Philip.bergman@amcny.org

CONTRACT NUMBER: P01 CA33049 (NCI)
P01 CA59350 (NCI)
R01 CA56821 (NCI)

SOURCE: Clinical cancer research : an official journal of the American Association for Cancer Research, (2003 Apr) 9 (4) 1284-90.
Journal code: 9502500. ISSN: 1078-0432.

PUB. COUNTRY: United States

DOCUMENT TYPE: (CLINICAL TRIAL)
(CLINICAL TRIAL, PHASE I)
Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200401

ENTRY DATE: Entered STN: 20030417
Last Updated on STN: 20040121
Entered Medline: 20040120

AB PURPOSE: **Canine** malignant **melanoma** (CMM) is a spontaneous, aggressive, and metastatic **neoplasm.** Preclinical mouse studies have shown that **xenogeneic DNA** vaccination with genes encoding **tyrosinase** family members can induce antibody and cytotoxic T-cell responses, resulting in **tumor** rejection. These studies provided the rationale for a trial of **xenogeneic DNA** vaccination in CMM using the **human tyrosinase** gene. EXPERIMENTAL DESIGN: Three cohorts of three **dogs** each with advanced (WHO stage II, III, or IV) CMM received four biweekly i.m. injections (dose levels 100, 500, or 1500 micro g, respectively/vaccination) of **human tyrosinase** plasmid **DNA** i.m. via the Biojector2000 delivery device. RESULTS: Mild local reactions at injection sites were the only toxicities observed, with no signs of autoimmunity. One **dog** with stage IV disease had a complete clinical response in multiple lung metastases for 329 days. Two **dogs** with stage IV disease had long-term survivals (421 and 588+ days) in the face of significant bulky metastatic disease, and two other **dogs** with locally controlled stage II/III disease had long-term survivals (501 and 496 days) with no evidence of **melanoma** on necropsy. Four other **dogs** were euthanized because of progression of the primary **tumor.** The Kaplan-Meier median survival time for all nine **dogs** was 389 days. CONCLUSIONS: The results of this trial demonstrate that **xenogeneic DNA** vaccination of **dogs** with advanced malignant **melanoma** is a safe and potentially therapeutic modality. On the basis of these results, additional evaluation of this novel therapeutic is warranted in locally controlled CMM and advanced **human melanoma.**

L16 ANSWER 3 OF 6 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN

ACCESSION NUMBER: 2003:513728 BIOSIS
DOCUMENT NUMBER: PREV200300513108
TITLE: Phase I trials of **xenogeneic DNA** vaccination with **human tyrosinase** or murine gp75 in client-owned **dogs** with advanced stage spontaneous malignant **melanoma.**
AUTHOR(S): Bergman, Philip J. [Reprint Author]; McKnight, Joanne [Reprint Author]; Houghton, Alan N.; Dowd, Michael [Reprint Author]; Craft, Diane M.; Kang, Xiaoqiang; Riviere, Isabelle; Hohenhaus, Ann E.; Hicklin, Daniel J.; Wolchok, Jedd
CORPORATE SOURCE: The Animal Medical Center, New York, NY, USA
SOURCE: Proceedings of the American Association for Cancer Research Annual Meeting, (July 2003) Vol. 44, pp. 758. print.
Meeting Info.: 94th Annual Meeting of the American Association for Cancer Research. Washington, DC, USA. July 11-14, 2003.
ISSN: 0197-016X.
DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LANGUAGE: English
ENTRY DATE: Entered STN: 5 Nov 2003
Last Updated on STN: 5 Nov 2003

L16 ANSWER 4 OF 6 MEDLINE on STN DUPLICATE 2
ACCESSION NUMBER: 2003232830 MEDLINE
DOCUMENT NUMBER: PubMed ID: 12755292
TITLE: Development of a multiple-marker polymerase chain reaction assay for detection of metastatic **melanoma** in lymph node aspirates of **dogs.**
AUTHOR: Catchpole Brian; Gould Sara M; Kellett-Gregory Lindsay M; Dobson Jane M
CORPORATE SOURCE: Department of Pathology and Infectious Diseases, Royal Veterinary College, University of London, London, UK.
SOURCE: American journal of veterinary research, (2003 May) 64 (5) 544-9.
Journal code: 0375011. ISSN: 0002-9645.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200307
ENTRY DATE: Entered STN: 20030521
Last Updated on STN: 20030708
Entered Medline: 20030707

AB OBJECTIVE: To develop a reverse transcriptase-polymerase chain reaction (RT-PCR) assay to detect **canine melanoma**-associated antigens (MAAs) and to use this technique to screen aspirates of lymph nodes (LNs) for evidence of metastatic spread of oral malignant **melanoma.** ANIMALS: 7 **dogs** with oral malignant **melanoma** and 4 **dogs** with multicentric lymphosarcoma. PROCEDURES: We prepared cDNA from **melanoma tumor** biopsies and fine-needle aspirates obtained from submandibular LNs of **dogs** with oral malignant **melanoma** or multicentric lymphosarcoma. The RT-PCR assay was performed by use of **tyrosinase**, Melan-A, gp100, **tyrosinase**-related protein 2 (TRP-2), or **melanoma** antigen-encoding gene B (MAGE-B)-specific primers. RESULTS: We detected MAGE-B mRNA in **canine** testicular tissue but not in **melanoma** biopsy specimens. **Tyrosinase** , Melan-A, gp100, and TRP-2 mRNAs were detected in **tumor** biopsy

specimens and in 2 of 5 LN aspirates from **dogs** with **melanoma**, suggesting metastatic spread in those 2 **dogs.** We did not detect MAAs in LN aspirates obtained from **dogs** with multicentric lymphosarcoma. Sequencing of **canine** Melan-A and gp100 PCR products confirmed the specificity of the assay for these genes. CONCLUSIONS AND CLINICAL RELEVANCE: Clinical staging of **dogs** with oral malignant **melanoma** is useful to assist in designing appropriate treatments. However, results of histologic examination of LN biopsy specimens can be inconclusive and, in **humans**, can underestimate the number of patients with metastatic disease. Molecular staging of **melanomas** in **dogs** can be achieved by screening LN aspirates for MAA mRNA, and this can be performed in combination with cytologic examination to aid in detection of metastatic disease.

L16 ANSWER 5 OF 6 WPIDS COPYRIGHT 2004 THE THOMSON CORP on STN
ACCESSION NUMBER: 2003-182484 [18] WPIDS
CROSS REFERENCE: 1998-348236 [30]
DOC. NO. CPI: C2003-048030
TITLE: Treating **melanoma** in a mammalian subject comprises administering to the subject an immunological amount of a xenogeneic differentiation antigen of the same type as a differentiation antigen expressed by **melanoma** cells of the subject.
DERWENT CLASS: B04 D16
INVENTOR(S): BERGMAN, P J; HOUGHTON, A N; WOLCHOK, J D
PATENT ASSIGNEE(S): (BERG-I) BERGMAN P J; (HOUG-I) HOUGHTON A N; (WOLC-I) WOLCHOK J D
COUNTRY COUNT: 1
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 2002150589	A1	20021017	(200318)*		15

APPLICATION DETAILS:

PATENT NO	KIND		APPLICATION	DATE
US 2002150589	A1	Provisional	US 1996-32535P	19961210
		Provisional	US 1997-36419P	19970218
		CIP of	WO 1997-US22669	19971210
		CIP of	US 1999-308697	19990521
		Provisional	US 2000-180651P	20000126
		CIP of	US 2000-627694	20000728
			US 2001-996128	20011127

FILING DETAILS:

PATENT NO	KIND		PATENT NO
US 2002150589	A1	CIP of	US 6328969

PRIORITY APPLN. INFO: US 2001-996128 20011127; US
1996-32535P 19961210; US
1997-36419P 19970218; WO
1997-US22669 19971210; US
1999-308697 19990521; US
2000-180651P 20000126; US
2000-627694 20000728

AN 2003-182484 [18] WPIDS
CR 1998-348236 [30]
AB US2002150589 A UPAB: 20030317
NOVELTY - Treating **melanoma** (M1) in a mammalian subject comprising administering to the subject an immunological amount of a xenogeneic differentiation antigen (DA) of the same type as a (DA) expressed by **melanoma** cells of the subject, is new.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for vectors comprising 6408 or 6485 base pairs (bp), fully defined in the specification.
ACTIVITY - Cytostatic. C57BL/6 mice were immunized with syngeneic **melanoma** cells. Immunizations were tested by intraperitoneal, subcutaneous or intradermal route. Mice were then assessed for antibodies against gp75 by ELISA. No antibodies or CTL against gp75 were detected after immunization.
MECHANISM OF ACTION - Gene therapy.
USE - The methods and xenogeneic (DA) are useful for treating **canine** malignant **melanoma** in **dog** suffering from the disease by administering an immunological amount of the xenogeneic (DA) (claimed) and for other mammals.
Dwg.0/4

L16 ANSWER 6 OF 6 MEDLINE on STN
ACCESSION NUMBER: 2000065928 MEDLINE
DOCUMENT NUMBER: PubMed ID: 10598869
TITLE: **Tyrosinase** gene expression in clear cell sarcoma indicates a melanocytic origin: insight from the first reported **canine** case.
AUTHOR: Cangul I T; van Garderen E; van der Poel H J; Weijer K; Misdorp W
CORPORATE SOURCE: Department of Pathology, Faculty of Veterinary Medicine, Utrecht University, The Netherlands.
SOURCE: APMIS : acta pathologica, microbiologica, et immunologica Scandinavica, (1999 Nov) 107 (11) 982-8.
Journal code: 8803400. ISSN: 0903-4641.
PUB. COUNTRY: Denmark
DOCUMENT TYPE: (CASE REPORTS)
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
OTHER SOURCE: GENBANK-AF129000
ENTRY MONTH: 199912
ENTRY DATE: Entered STN: 20000113
Last Updated on STN: 20000113
Entered Medline: 19991228
AB The aim of this study was to characterize a metastasizing soft tissue **tumor** in a **dog**, which clinically, grossly and histologically showed a close resemblance to **human** clear cell sarcoma, a soft tissue variant of malignant **melanoma.** Ultrastructurally, melanosomes were found, indicating a melanocytic origin of the **tumor.** Using reverse-transcription polymerase chain reaction, expression of the gene encoding **tyrosinase** was determined in **tumor** cells. With this first case of **canine** clear cell sarcoma, as well as the earlier report from our laboratory on amelanotic **melanomas** in the cat, we demonstrate that expression of the **tyrosinase** gene may occur in a broader range of less differentiated melanocytic **tumors** in different species, including man.

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     FILE 'REGISTRY' ENTERED AT 13:58:43 ON 09 OCT 2004
                E TYROSINASE/CN
L6              1 SEA ABB=ON  TYROSINASE/CN

     FILE 'HCAPLUS' ENTERED AT 13:58:55 ON 09 OCT 2004
L7         694719 SEA ABB=ON  (?MELANOMA? OR ?CANCER? OR ?CARCIN? OR ?NEOPLASM?
                  OR ?TUMOR? OR ?TUMOUR?)
L8              9 SEA ABB=ON  L7 AND ?XENOGENEIC?(L)(L1 OR ?TYROSINASE?)
L9           2179 SEA ABB=ON  L7 AND (L1 OR ?TYROSINASE?)
L10          1007 SEA ABB=ON  L9 AND ((?HUMAN? OR ?SYNGENEIC?)(W)(?DIFF?(W)?ANTIG
                  EN?) OR ?HUMAN?)
L11           261 SEA ABB=ON  L10 AND (DNA? OR ?TUMOUR?(W)?AGENT?)
L12             6 SEA ABB=ON  L11 AND (?CANINE? OR DOG?)
L13            14 SEA ABB=ON  L8 OR L12
L14             6 SEA ABB=ON  L13 AND (?CANINE? OR DOG?) 6 cits from CA Plus

     FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, JICST-EPLUS, JAPIO' ENTERED AT
     14:02:11 ON 09 OCT 2004
L15             9 SEA ABB=ON  L14
L16             6 DUP REMOV L15 (3 DUPLICATES REMOVED) 6 cits from other
                                                       databases
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